

Algebra/Geometry Institute Summer 2006

Lesson Plan 3: Equivalent Fractions

Faculty Name: Erika Downing

School: Oakhurst Middle School Clarksdale, MS

Grade Level: 5th



Teaching Objective(s)

The student will identify equivalent fractions.

Instructional Activities

- The teacher will write the words *quick* and *fast* on the board. The teacher will ask, "What is the difference in the meaning of those two words?" The teacher will wait for student response. The teacher will say, "These words mean basically the same thing in most contexts. These are called synonyms in English. In math, when two things mean the same but are written differently, we call them equivalent. Today we are going to discuss finding equivalent fractions." TTW review the parts of a fraction.
- The teacher will write $\frac{1}{4}$ and $\frac{5}{20}$ on the board. The teacher will demonstrate how to find whether or not the fractions are equivalent by using cross multiplication.
 - Step 1: Multiply the numerator of the first fraction by the denominator of the second fraction.
 - Example: $1 \times 20 = 20$
 - Step 2: Multiply the numerator of the second fraction by the denominator of the first fraction.
 - Example: $5 \times 4 = 20$
 - Step 3: If the two products match, the fractions are equivalent.
- The teacher will continue with several other examples. (*Be sure to include fractions that are not equivalent*).
- The teacher will divide the class into groups of two – four students. The teacher will explain to the class that they are going to play *Fraction Memory*. The teacher will explain the rules of the game.
 - All cards will be shuffled and placed face down onto the table.
 - Each player takes turns flipping over two cards.
 - If the two cards the player flips are equivalent, they keep the pair of cards and take another turn.

- If the two cards the player flips are not equivalent, they are turned back over and it becomes the next player's turn.
- When all equivalent pairs are found, the player with the most equivalent pairs wins the game.
- The teacher will pass out a set of game cards to each group. The students will play the game while the teacher walks around and monitors the game.

Material and Resources

- Class set of fraction memory cards (attached)

Assessment

- The teacher will observe to see that the students are correctly finding equivalent fractions.

$$\frac{1}{2}$$

$$\frac{5}{10}$$

$$\frac{1}{3}$$

$$\frac{4}{12}$$

$$\frac{1}{4}$$

$$\frac{5}{20}$$

$$\frac{1}{5}$$

$$\frac{6}{30}$$

$$\frac{3}{4} \dots$$

$$\frac{6}{8}$$

$$\frac{3}{5}$$

$$\frac{9}{15}$$

$$\frac{4}{5}$$

$$\frac{12}{40}$$

$$\frac{3}{10}$$

$$\frac{8}{10}$$

5 | 9

15 | 27

4 | 9

28 | 63

6 | 11

18 | 33

3 | 7

12 | 28